

7530

A & B

MACK
APE 6BB 110T 7530A & B

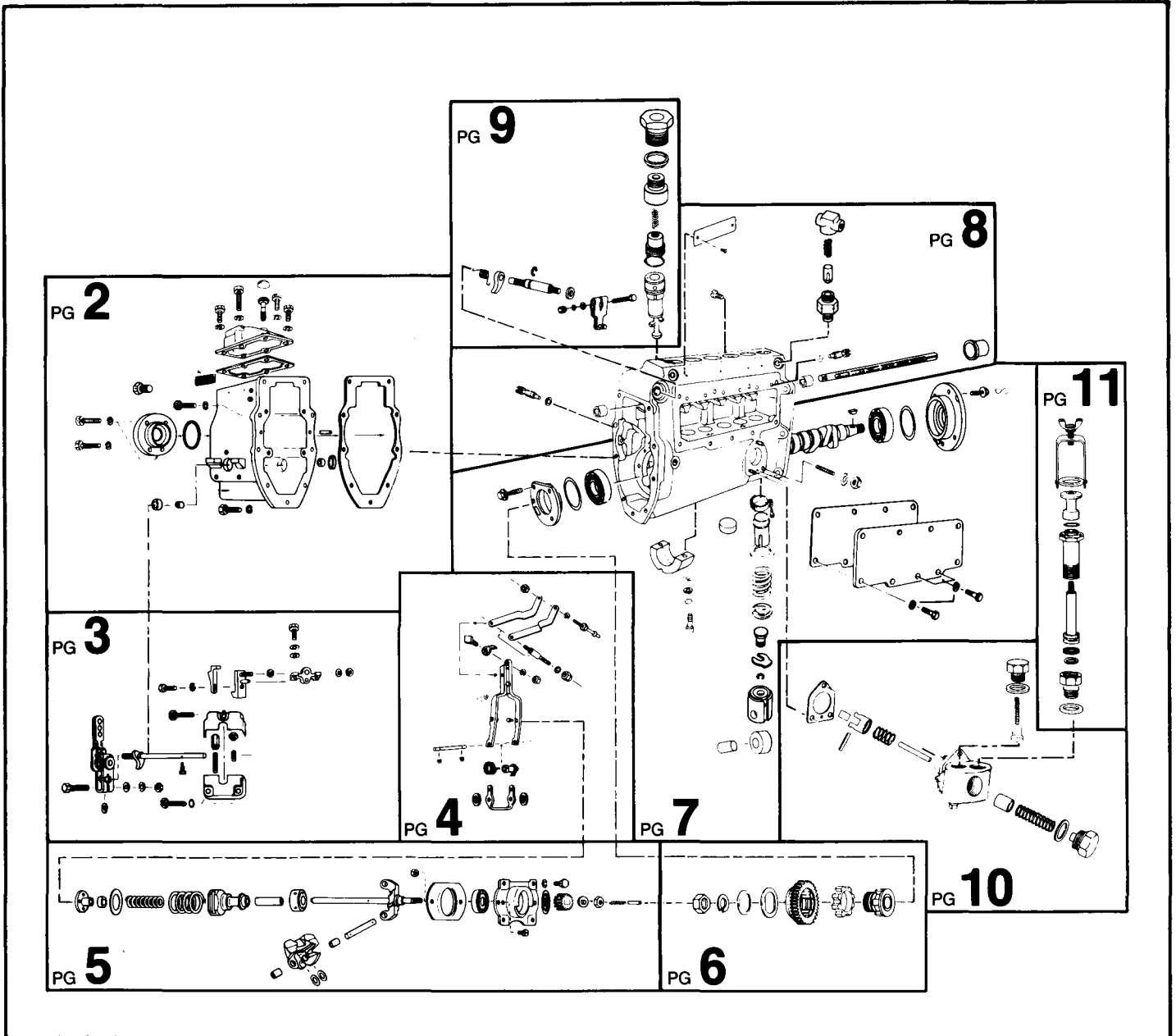
PUMP ROTATION:
Clockwise: Firing Order: 1-5-3-6-2-4
DRIVE END:
R. H. Side
TIMED FOR PORT CLOSING
SPECIAL FEATURES:



SERVICE PARTS

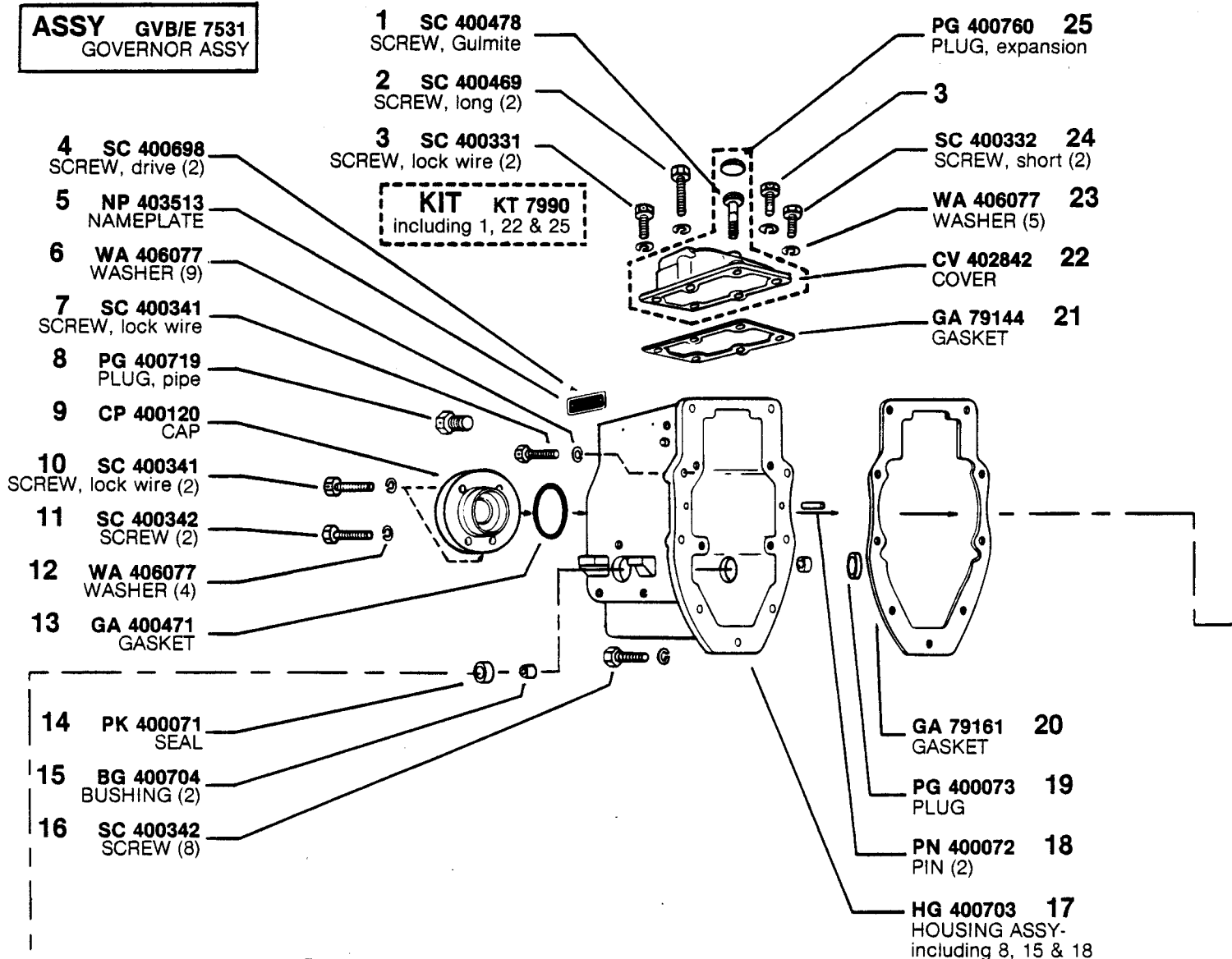
Following are all parts, part numbers, pump codes and calibrations for the *Model: APE 6BB 110T 7530A & B*. The exploded view drawing below is detailed with part numbers

listed on the pages indicated. Refer to the Index Section for explanations of codes and abbreviations.



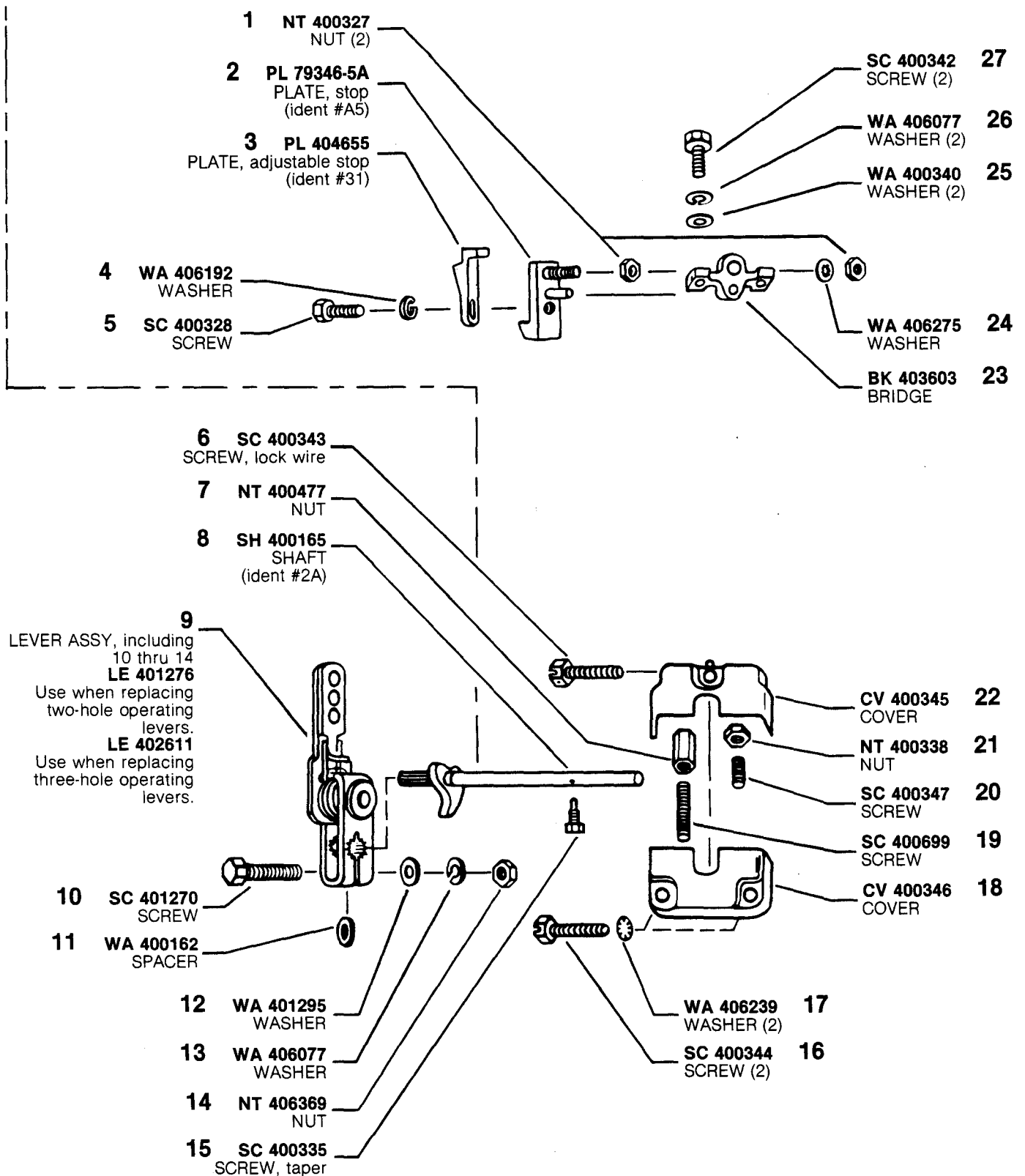
MODEL APE 6BB 110T 7530A & B

ASSY GVB/E 7531
GOVERNOR ASSY



*Quantity used is one, unless otherwise indicated in parenthesis () following description of part.

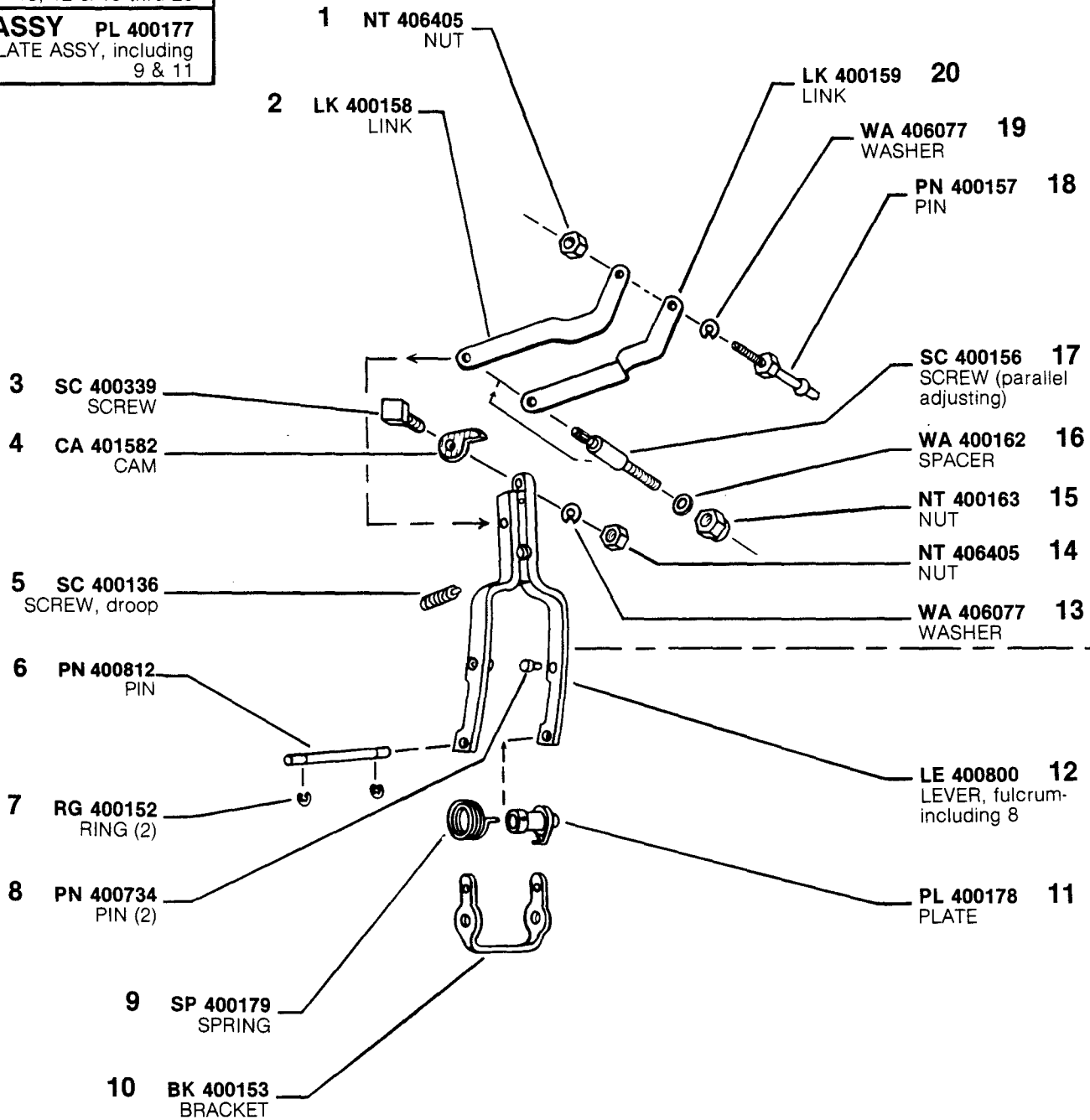
MODEL APE 6BB 110T 7530A&B



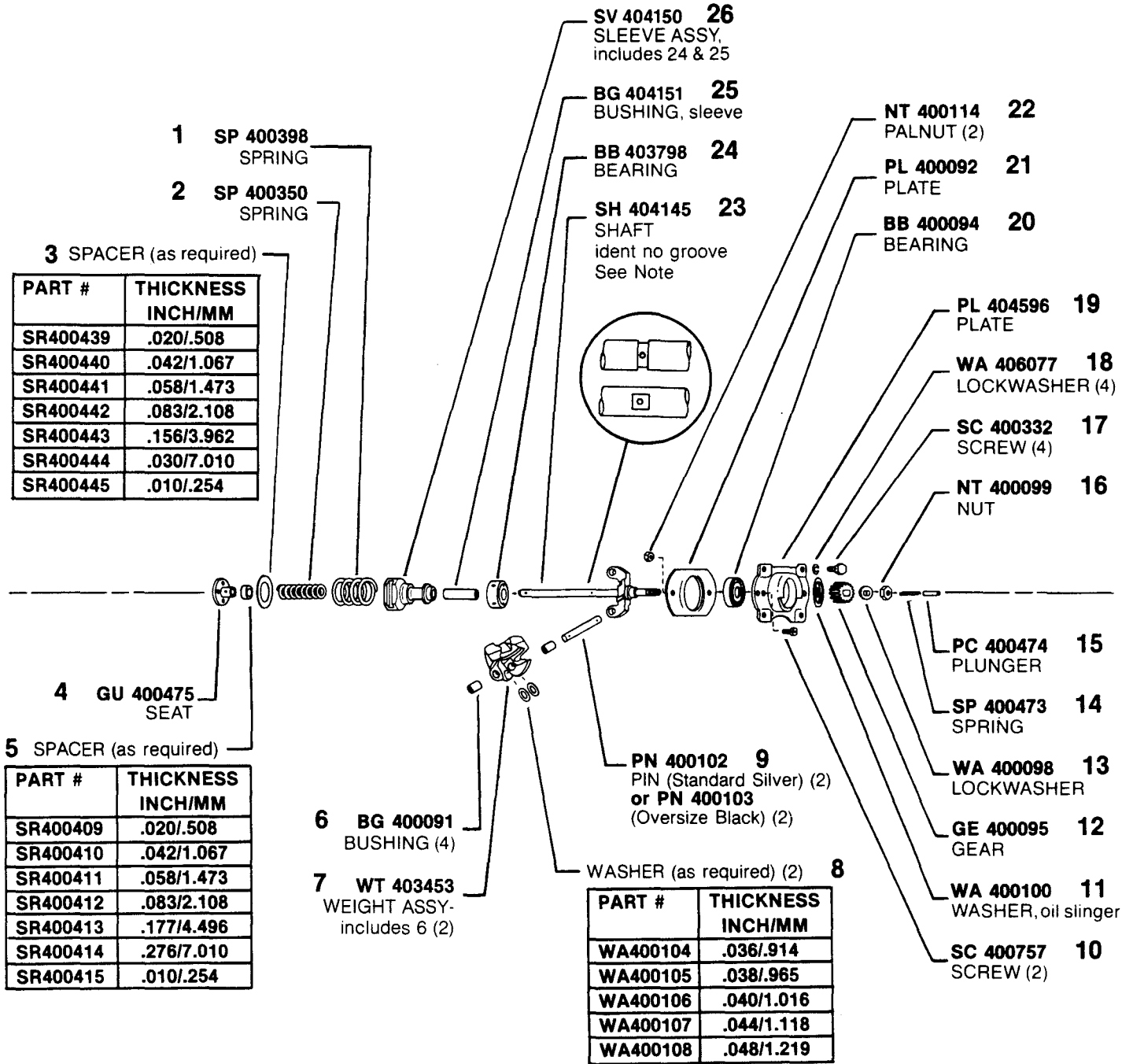
MODEL APE 6BB 110T 7530A&B

ASSY LE 400782
LEVER ASSY, fulcrum-
including 1, 2, 6 thru 8,
10, 12 & 15 thru 20

ASSY PL 400177
PLATE ASSY, including
9 & 11



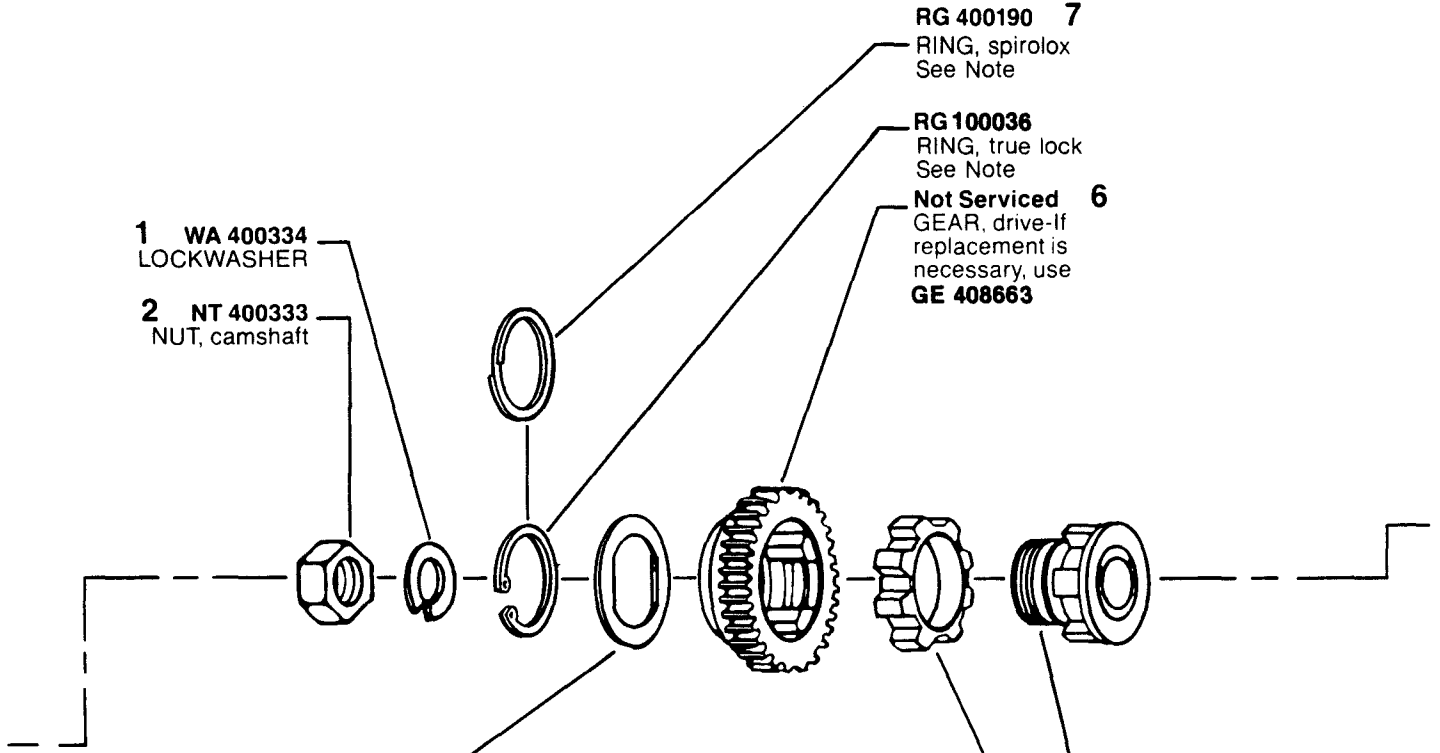
MODEL APE 6BB 110T 7530A&B



NOTE: When replacing shaft (#23 w/groove) with latest shaft (SH404145 no groove) BG404151 (25) MUST be used. Shaft with groove used BG400118.

MODEL APE 6BB 110T 7530A&B

ASSY GE 408663
(RUBBER DRIVE)
DRIVE ASSY, includes
3 thru 7



1 WA 400334
LOCKWASHER

2 NT 400333
NUT, camshaft

RG 400190 7
RING, spirolox
See Note

RG 100036
RING, true lock
See Note

Not Serviced 6
GEAR, drive-If
replacement is
necessary, use
GE 408663

3 SPACER (as required)

PART #	THICKNESS INCH/MM
SR400191	.065/1.65
SR400192	.070/1.78
SR400193	.075/1.90
SR400194	.080/2.03
SR400195	.085/2.16
SR400196	.0825/1.59
SR400197	.060/1.52
SR400198	.0675/1.71
SR400199	.0725/1.84
SR400200	.0775/1.97
SR400201	.0825/2.10
SR400202	.0875/2.22

Not Serviced 5
HUB, drive-If
replacement is
necessary, use
GE 408663

IT 400189 4
INSERT, drive

#7 NOTE: Earlier rubber drive assy GE 400182 used RG 400190 (Spirolox ring), later assy GE 408663 using RG 100036 (true lock ring). Spirolox & true lock rings are NOT interchangeable.

ASSY NOTE: Pumps equipped with GE 7992A "Friction Clutch" refer to Service Instructions Model 6BBT Parts Bulletin P4 for Parts.

MODEL APE 6BB 110T 7530A&B

ASSY TP 7651A
TAPPET ASSY-
including 12-17 (6)

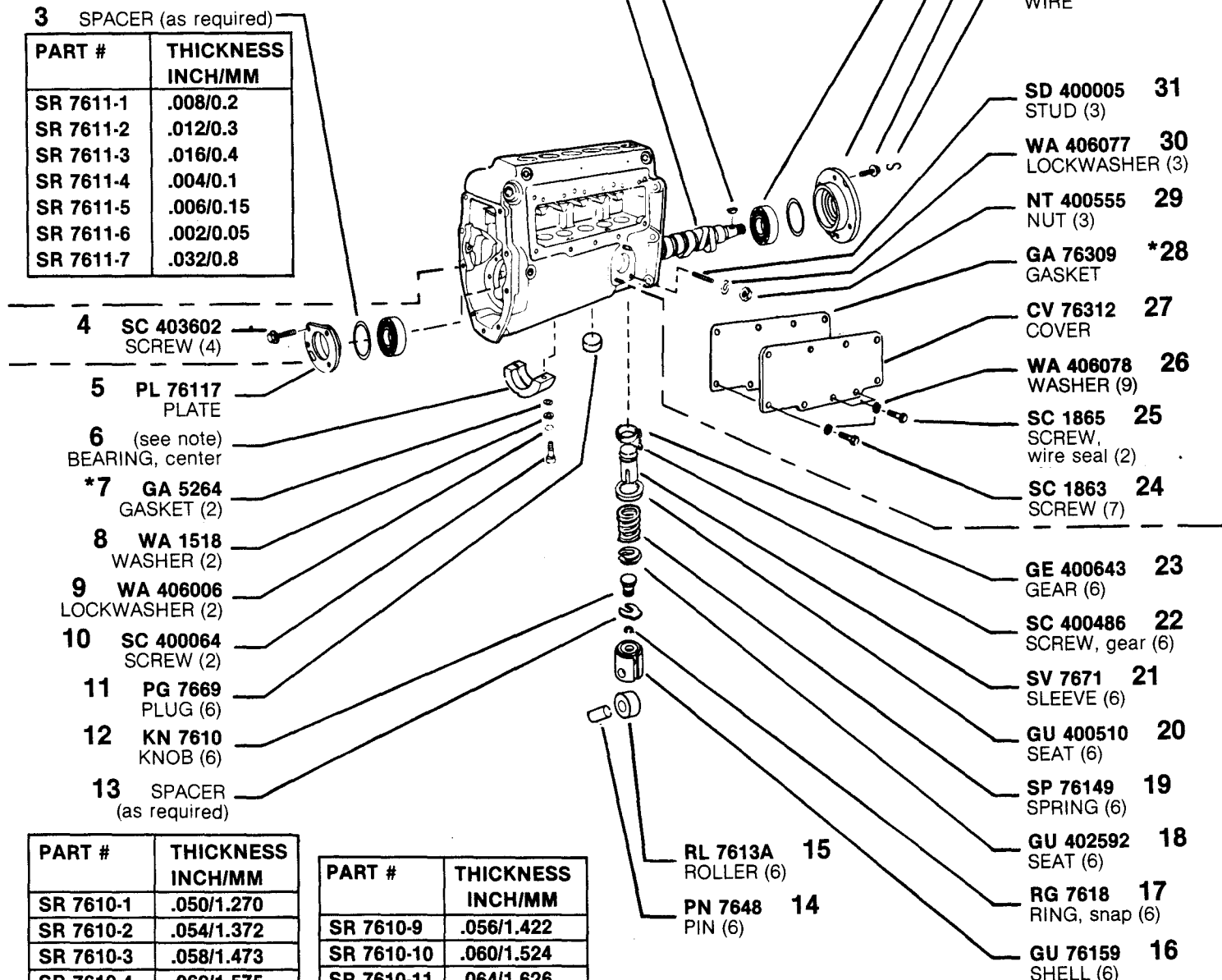
ASSY HG 761246-1A
HOUSING ASSY-
including 31; 4 on page
8; and 8 thru 10, 17 &
18 on page 9
See note

1 KY 403378
KEY, WOODRUFF
(Earlier Camshafts
require KY 764)

2 SH 76121
CAMSHAFT
See note

3 SPACER (as required)

PART #	THICKNESS INCH/MM
SR 7611-1	.008/0.2
SR 7611-2	.012/0.3
SR 7611-3	.016/0.4
SR 7611-4	.004/0.1
SR 7611-5	.006/0.15
SR 7611-6	.002/0.05
SR 7611-7	.032/0.8



4 SC 403602
SCREW (4)

5 PL 76117
PLATE

6 (see note)
BEARING, center

***7 GA 5264**
GASKET (2)

8 WA 1518
WASHER (2)

9 WA 406006
LOCKWASHER (2)

10 SC 400064
SCREW (2)

11 PG 7669
PLUG (6)

12 KN 7610
KNOB (6)

13 SPACER
(as required)

RB 1004 35
BEARING (2)

PL 76113 34
PLATE

SC 400331 33
SCREW (3)

WI 763 32
WIRE

SD 400005 31
STUD (3)

WA 406077 30
LOCKWASHER (3)

NT 400555 29
NUT (3)

GA 76309 *28
GASKET

CV 76312 27
COVER

WA 406078 26
WASHER (9)

SC 1865 25
SCREW,
wire seal (2)

SC 1863 24
SCREW (7)

GE 400643 23
GEAR (6)

SC 400486 22
SCREW, gear (6)

SV 7671 21
SLEEVE (6)

GU 400510 20
SEAT (6)

SP 76149 19
SPRING (6)

GU 402592 18
SEAT (6)

RG 7618 17
RING, snap (6)

GU 76159 16
SHELL (6)

RL 7613A 15
ROLLER (6)

PN 7648 14
PIN (6)

PART #	THICKNESS INCH/MM
SR 7610-1	.050/1.270
SR 7610-2	.054/1.372
SR 7610-3	.058/1.473
SR 7610-4	.062/1.575
SR 7610-5	.066/1.676
SR 7610-6	.046/1.168
SR 7610-7	.048/1.219
SR 7610-8	.052/1.321

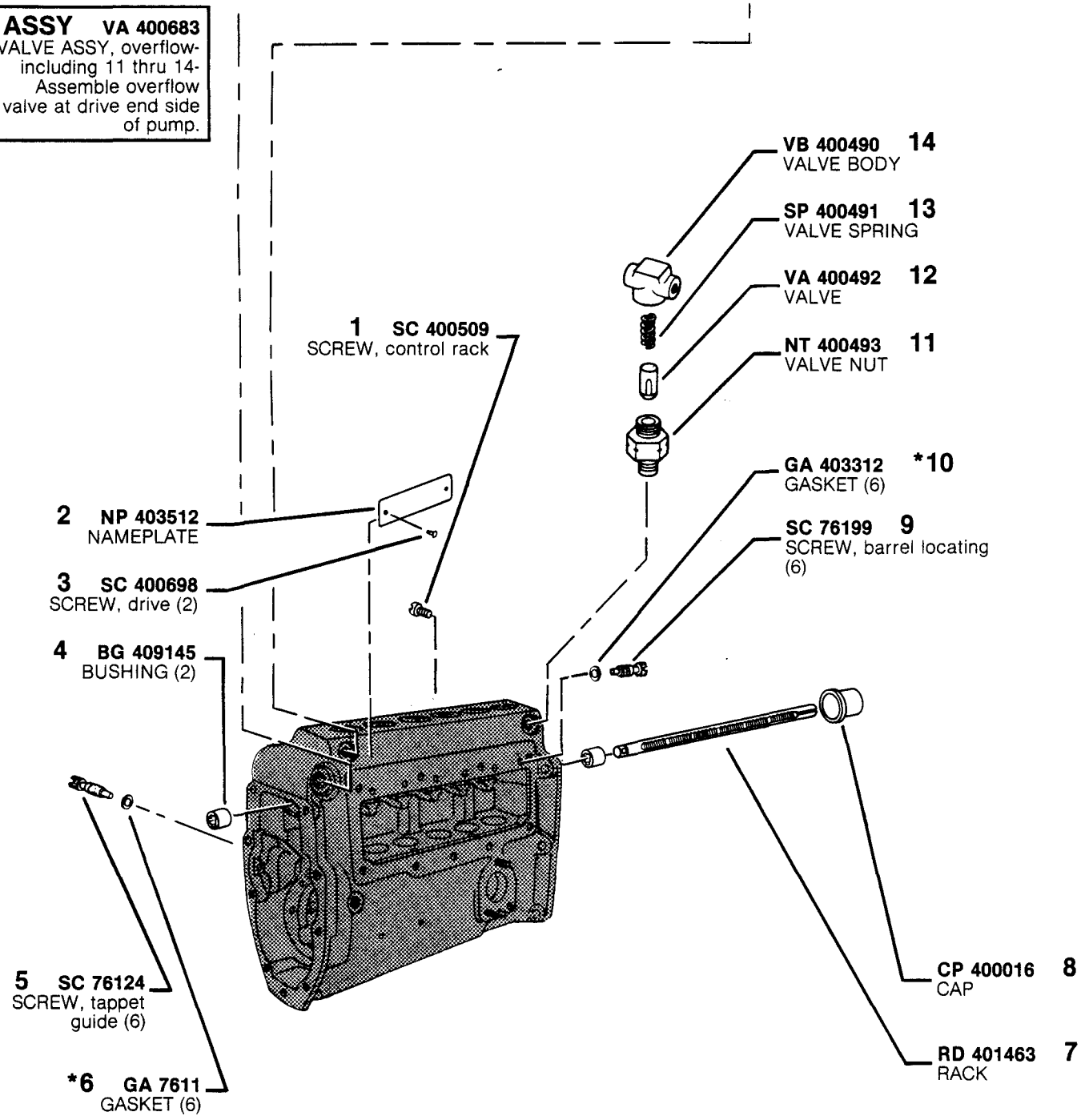
PART #	THICKNESS INCH/MM
SR 7610-9	.056/1.422
SR 7610-10	.060/1.524
SR 7610-11	.064/1.626
SR 7610-15	.042/1.067
SR 7610-16	.044/1.118
SR 7610-17	.068/1.727
SR 7610-18	.072/1.829

NOTE: Latest pump housings and camshafts do not allow use of center bearing. If bearing is not to be used, refer to note on page 13 (PG 400760 information)

MODEL APE 6BB 110T 7530A&B

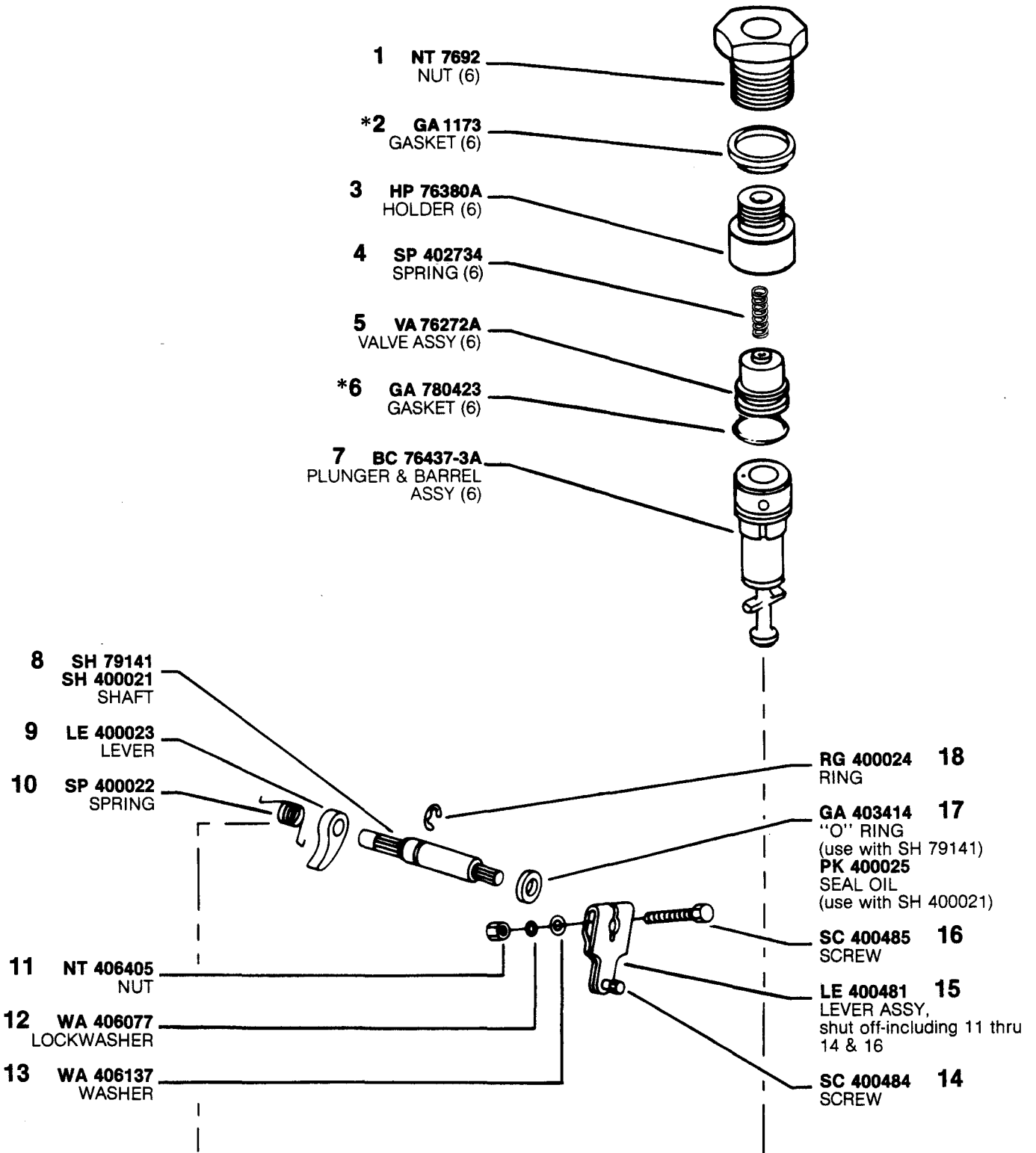
*Denotes parts included in "Pump & Governor Repair Gasket Kit" KT 76399-2.

ASSY VA 400683
VALVE ASSY, overflow-
including 11 thru 14-
Assemble overflow
valve at drive end side
of pump.



*Denotes parts included in "Pump & Governor Repair Gasket Kit" KT 76399-2.

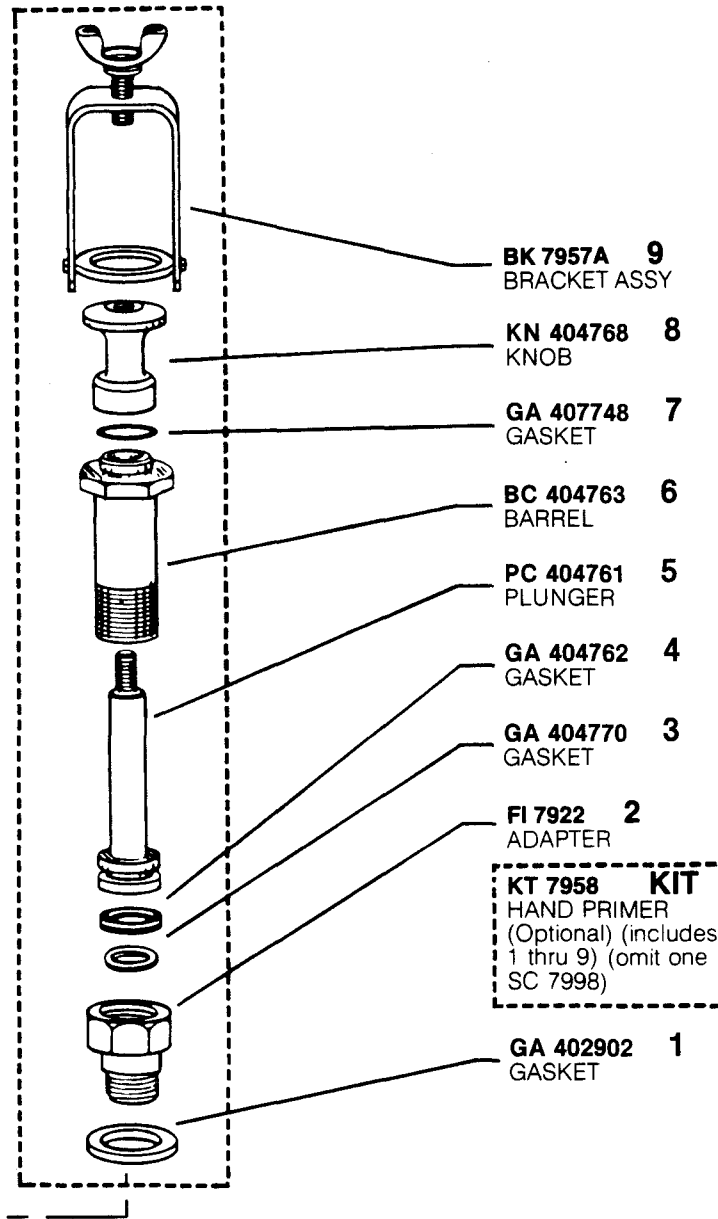
MODEL APE 6BB 110T 7530A&B



*Denotes parts included in "Pump & Governor Repair Gasket Kit" KT 76399-2.

MODEL APE 6BB 110T 7530A&B

ASSY MP 404760
MANUAL PRIMER
ASSY, including 3 thru 9
(Optional)



MODEL APE 6BB 110T 7530A&B

CALIBRATION SET-UP

Engine Holders	HNS 780050	Calibrating Oil	Viscor 1487C @ 100°-105°F (38°-41°C) at pump inlet
Opening Pressure	4200-4350 psi	Lube Oil	SAE #20 or #30 at 20 psi/1.4 bar
Engine Nozzles	NBM770000	PROCEDURE	Refer to Service Instructions and use figures below
Engine Nozzle & Holder Assy	Ref. #NHM 780001		
High Pressure Tubing	1/4"OD x .067"ID x 39" Long		

7530A&B CODE 1 DATA

Engine Model	EMC6-300R	Governor Outer Spring	
Engine Static Timing	14°	Precompression	Flush to 0.5mm (.020")
Customer No.	313GC5154-P18	Governor Inner Spring Gap	.375-4.00mm(.148"-.157")
Governor Speeds	250/850	Lift to Port Closing	3.00-3.20mm (.118"-.126"), cam lift with control rack at approximate mid-travel position
Cam Nose Angle	88°-92°		

STEP	A	B	C	D
	Full Load at 1.200" Rack Ext	Cam Departure	Peak Torque (from actual A delivery)	Droop Screw (from actual A delivery)
RPM	850	880	700	630
DEL cc/500 str	97.0-102.0	NONE	+ 13.5 ± 3.0	+ 19.5 ± 3.0
DEL cc/300 str	58.0-61.0	NONE	+ 8.0 ± 2.0	+ 11.5 ± 2.0

STEP	E	F	G
	"PLE"	Low Idle	Minimum Delivery
RPM	800	300	75
DEL cc/500 str	63.0-67.0	12-14	—
DEL cc/300 str	38.0-40.5	7.0-8.5	—
DEL cc/100 str	—	—	12.0

SERVICE CHECK — A, C & D are applicable.

NOTE ON ELIMINATION OF CENTER BEARING IN APE 6BB FUEL INJECTION PUMPS

INFORMATION:

Latest APE 6BB fuel injection pumps do not incorporate center bearings and accordingly, pump housings and cam shafts are no longer machined to provide for use of the part.

For earlier type APE 6BB pumps, elimination of the center bearing is **OPTIONAL**.

CAUTION: Prior to assembly of a camshaft and center bearing to a pump, first determine that the bearing can physically be used. Insure that there are holes in the housing for the bearing retaining screws and that the journal between cam lobes #3 and #4 has been machined to accept the part.

If a housing has been machined to accept a center bearing and the bearing is not to be utilized, then the screw holes must be plugged per the following instructions:

INSTRUCTIONS:

Plug center bearing screw holes as follows:

1. Clean out screw hole counterbores.
2. Press plug, PG 400760 into each hole.
3. Seal plug in hole with Devcon F, or an equivalent epoxy.

NOTE: Elimination of the center bearing is only to be undertaken if the initial service problem required removal of the camshaft from the pump.

THIS NOTE SUPERCEDES MODEL 6BBT, SERVICE BULLETIN S7.

MODEL APE 6BB 110T 7530A&B